



AIRCRAFT WEIGHT AND C.G DETERMINATION

REPORT NO : 01/WB/SNJ/IX/2021

DATE : 09 SEPTEMBER 2021

AIRCRAFT REGISTRATION : PK-SNJ
AIRCRAFT TYPE : C208B EX
AIRCRAFT SERIAL NUMBER : 208B-5640
PROPERTY OF : PT. SMART CAKRWALA AVIATION
PLACE OF WEIGHING : PONDOK CABE
REASON OF WEIGHING : RECALCULATION APE STOL MODIFICATION
CONFIGURATION : **PAX**
PERFORMED BY : YANUAR ABDUL FATAH
SIGNED:  DATE: 09/09/2021
CHECKED BY : ANDREAS HERYANSYAH.
SIGNED:  DATE: 09/09/2021

RESULTS

EMPTY WEIGHT	: 5366.13
EMPTY C.G FROM DATTUM LINE	: 191.88
INDEX MAC %	: 21.55
VALID UNTIL	: SEPTEMBER 2026

WEIGHING EQUIPMENT

PART NUMBER	: UNK
SERIAL NUMBER	: UNK
VALIDATION	: UNK

APPROVED BY:


**YANUAR ABDUL FATAH
CHIEF INSPECTOR**

AIRCRAFT WEIGHT & BALANCE

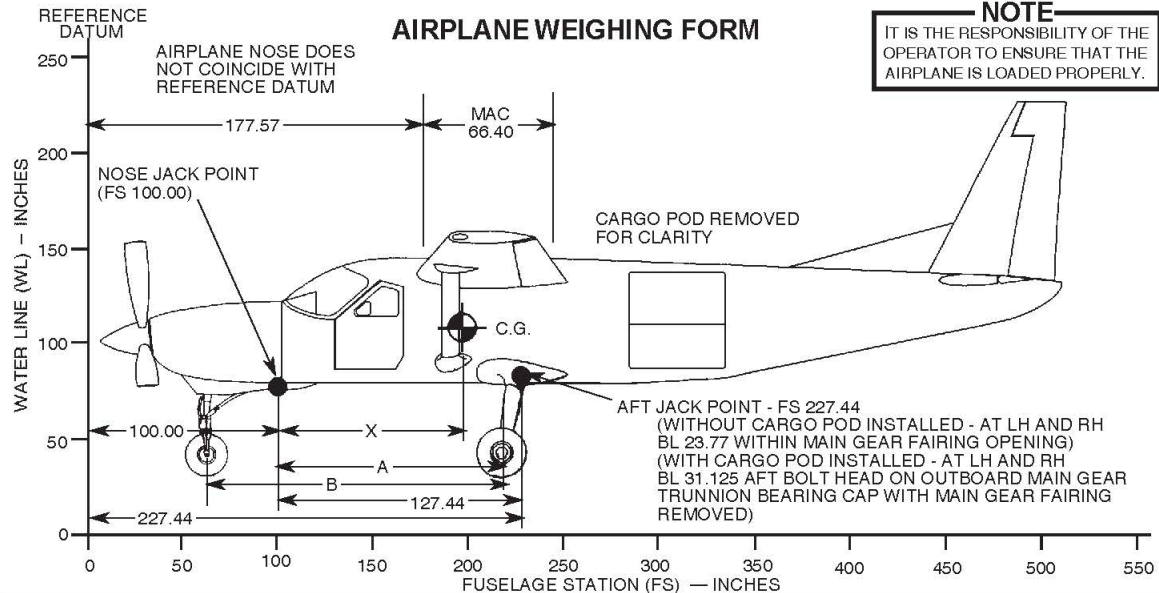
**MODEL 208B
CARAVAN I**

WEIGHT AND BALANCE DATA



A Textron Company

SERIAL NUMBER 208B5640 **REGISTRATION NUMBER** N9052T **DATE** 07/24/2021



LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

$$(X) = (A) - \frac{(\text{Nose Gear Net Weight})(896)}{116.75 \text{ Nose and Main Landing Gear Weight Totalled}(5216)} \times (B) 157.75 = (89.65) \text{ Inches}$$

$$\text{CG Arm of Airplane} = 100 + (X) = (189.65) \text{ Inches Aft of Datum}$$

MEASURING A AND B

MEASURE A AND B PER PILOT'S OPERATING HANDBOOK INSTRUCTIONS TO ASSIST IN LOCATING CG WITH AIRPLANE WEIGHED ON LANDING GEAR

LOCATING CG WITH AIRPLANE ON JACK PADS

FORMULA for Longitudinal CG

$$\text{CG Arm of Airplane} = 227.44 - \frac{127.44 \times (\text{Nose Jack Point Net Weight})}{(\text{Nose and Aft Jack Point Weight Totalled})} = (\text{Inches Aft of Datum})$$

LEVELING PROVISIONS

LONGITUDINAL - LEFT SIDE OF FUSELAGE AT FS 239.00 & 272.00
LATERAL - SEAT RAILS AFT OF PILOT AND FRONT PASSENGER SEATS

AIRPLANE AS WEIGHED TABLE

POSITION	SCALE READING	SCALE DRIFT	TARE	NET WEIGHT
LEFT SIDE	2166.00	0	0	2166.00
RIGHT SIDE	2154.00	0	0	2154.00
NOSE	896.00	0	0	896.00
AIRPLANE TOTAL AS WEIGHED				5216.00

LOCATING PERCENT MAC

FORMULA for Percent MAC

$$\text{CG Percent MAC} = \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640}$$

BASIC EMPTY WEIGHT AND CENTER-OF-GRAVITY TABLE

ITEM	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 (INCH-POUNDS)
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL)	5216.00	189.65	989.21
DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALLON S/N 208B0001 Thru 208B0009 Not Modified With SK208-52 S/N 208B0001 Thru 208B0009 Modified With SK208-52 And S/N 208B0090 And On	20.1 24.1	205.7 206.4	4.97
See attached sheet for overages and shortages	48.83	302.18	14.76
BASIC EMPTY WEIGHT	5288.93	190.77	1008.94

CESSNA AIRCRAFT COMPANY, AIRCRAFT DIVISION, P.O. BOX 7704, WICHITA, KANSAS 67277

FORM NUMBER 1692-2, 15 July 1986
REVISED 22 January 2002



AIRCRAFT WEIGHT & BALANCE

TABEL1

BASIC ITEM NOT INCLUDED WHEN WEIGHING	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
APE STOL KIT STC #: SAO1805SE	5.80	203.00	1.17
BENCH ASSY	46.30	267.69	12.39
SINGLE SEAT ASSY	25.10	285.55	7.16
TOTAL	77.2	268.63	20.73

TABEL 2

DESCRIPTION OF ACTION PERFORMED	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
TOTAL			

TABEL 3

AIRCRAFT WEIGHING REPORT	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT/1000 INCH POUNDS
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL) INCLUDED DRAINABLE UNUSABLE FUEL AT 6.75 POUNDS PER GALON	5288.93	190.77	1008.94
WEIGHT FROM TABLE 1 (+)	77.2	268.63	20.73
TOTAL	5366.13	191.88	1029.67



AIRCRAFT WEIGHT & BALANCE

BASIC EMPTY WEIGHT AND CENTER OF GRAVITY TABLE

LOCATING PERCENT MAC

$$\begin{aligned}\text{CG Percent MAC} &= \frac{(\text{CG Arm of Airplane}) - 177.57}{0.6640} \\ &= \frac{191.88 - 177.57}{0.6640} \\ &= 21.55 \%\end{aligned}$$

AIRCRAFT WEIGHT & BALANCE

PRIOR TO WEIGHT AND BALANCE CHECK				
AIRCRAFT TYPE : CESSNA C208B EX CARAVAN AIRCRAFT REGISTRATION : PK-SNJ AIRCRAFT SERIAL NUMBER : 208B-5640 DATE OF WEIGHING : 24 JULY 2021				
NO.	DESCRIPTION	APPL	CHECK	REMARKS
A	STANDARD ITEMS			
1	All fuel tank EMPTY or recorded / FULL	√	Empty	-
2	All engine oil tanks EMPTY or recorded / FULL	√	Full	-
3	All others oil tanks FULL (included Propeller, Starters, Gearbox and Air Cycle)	√	Full	-
4	Hydraulic tanks FULL	√	Full	-
B	STANDARD EQUIPMENTS			
1	Technical supply or Flight Kits	x	N/A	-
2	Aircraft Books, Manuals and Papers	x	1 Bag	-
3	AXE	x	1 EA	-
4	Fire Extinguisher	√	1 EA	-
5	First Aid Kit	x	1 Box	-
6	Life Vests	x	11 EA	-
7	Life Raft	x	N/A	-
8	Survival Kit	x	N/A	-